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ABILITY GROUPING--WHAT GOOD IS IT.

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RESEARCH FINDINGS ON ABILITY GROUPING ARE INCONCLUSIVE BECAUSE NEITHER HETEROGENEITY NOR HOMOGENEITY HAS BEEN DEFINED WITH SUFFICIENT CLARITY. THE TENDENCY IN THESE STUDIES HAS BEEN TO STRESS THE PERFORMANCE OF THE PUPILS IN SUCH CLASSES RATHER THAN THE PERFORMANCE OF THE CLASS AS A WHOLE. IN A STUDY OF 181 CLASSES (4,705 PUPILS) HOMOGENEITY WAS MEASURED BY THE STANDARD DEVIATION OF CLASS PERFORMANCE ON THE FIRST TWO METROPOLITAN READING TESTS GIVEN IN TWO SUCCESSIVE YEARS. GROWTH WAS THEN DETERMINED BY THE DIFFERENCES IN CLASS MEANS ON THE TWO TESTS. THE SAME SUBJECTS WERE TESTED IN GRADE THREE AND FOUR, AND WERE DIVIDED INTO HIGH, AVERAGE, AND LOW LEVELS OF ACHIEVEMENT AND DEGREE OF HOMOGENEITY. (A STANDARD DEVIATION OF 6.0 THROUGH 8.9 MONTHS CHARACTERIZED "AVERAGE HOMOGENEITY.") FINDINGS SHOW AN INCONSISTENT GROWTH PATTERN--(1) ON THE WORD KNOWLEDGE SUBTEST, MEAN GROWTH WAS PRACTICALLY IDENTICAL FOR THE AVERAGE AND LOW HOMOGENEITY CLASSES, AND (2) ON THE READING SUBTEST, THE LOW HOMOGENEITY CLASSES SHOWED GREATER GROWTH THAN THE AVERAGE OR HIGH CLASSES. EVIDENCE OF INCONSISTENCY WAS ALSO EVIDENT WHEN VARIOUS COMBINATIONS OF INITIAL ACHIEVEMENT LEVEL AND CLASS HOMOGENEITY WERE ANALYZED. THEREFORE, NARROWING THE RANGE OF ABILITY IN CLASSES DOES NOT IPSO FACTO IMPROVE PUPIL ACHIEVEMENT. PROGRAMS DESIGNED SPECIFICALLY FOR THE SEVERAL ABILITY LEVELS ARE NEEDED AS A CONCOMITANT OF ABILITY GROUPING. THIS ARTICLE WAS PUBLISHED IN "THE URBAN REVIEW," VOLUME 2, FEBRUARY 1967. (NH)

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Ability Grouping—What Good Is It?

by Joseph Justman

If one were to ask an elementary school supervisor why he uses ability grouping in organizing his school at the beginning of each year, he would probably cite a number of reasons—pupil achievement is better, teachers find it easier to teach classes showing a narrow range of ability, the slower children do not become a hindrance to those who learn more readily, etc. Yet, when the research in the field is examined, the findings are generally inconclusive.*

To some degree, the conflicting results obtained in the scores of studies which have been conducted over the past 40 years is understandable. In most instances, the conditions under which the studies were conducted differed markedly. Moreover, most of the studies in the area of ability grouping compare the performance of pupils enrolled in "homogenous" and "heterogeneous" groups.

What is a "homogeneous" group? In most instances, the designation is a convenient administrative label. It is not a generic term. Whether or not a class is truly homogeneous depends on the spread of ability in the total population from which the class is drawn. It is not inconceivable that a so-called "heterogeneous" class drawn from a population with a narrow range will actually show less variation in ability than a so-called "homogeneous" class drawn from a broad-range population.

There is another shortcoming characteristic of the research in the field of ability grouping. Most of the studies tend to focus their attention not on the performance of the homogeneous or heterogeneous classes that have been formed, but on the performance of the children enrolled in such classes. The individual pupil, rather than the class, is the unit of analysis. The findings of a typical study are reported in the following terms: "Pupils enrolled in homogeneous groups, as contrasted with matched pupils enrolled in heterogeneous groups, tend to...." Somewhere in the program of analysis, the class has disappeared.

In view of the shortcomings noted above, there appears to be need for a study of ability grouping in which homogeneity would be strictly defined, and in which the class, rather than the pupil, would be the unit of analysis. Such a study is reported below. Homogeneity is defined in terms of the standard deviation of *class* performance on an initial test, and growth is measured in terms of differences in class means on initial and final tests.

Procedure

In a study conducted in the New York City schools, parallel forms of the Metropolitan Reading Test were administered in May of two successive years to all third-grade classes and to all fourth-grade classes in more than 75 schools. Those classes that had remained virtually intact (no more than two pupils had left or been added to the class) over the period of one year which had elapsed were identified. Because of mobility and of pupil absence on the date of testing, test data were not available for both years for every pupil. Classes in which data were not available for at least 20 pupils, and for at least 75 per cent of the pupils on register, were dropped. These restrictions effectively eliminated classes that were abnormally small, and classes for which only partial data were available.

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After these restrictions had been applied, data for a total of 4,705 pupils enrolled in 181 classes drawn from 42 schools remained available for further analysis. These classes were divided into three groups, based on mean initial test scores. Since the initial test was administered in May, when normal achievement would be represented by a grade score of 3.9, all classes in which the mean initial reading grade fell between 3.5 and 4.4 were classified as showing average achievement. The standard deviation at the initial testing was used to divide the classes in terms of homogeneity. A class was considered as showing average homogeneity if the standard deviation fell in the range from 6.0 through 8.9 months.

The Findings

A summary of the mean gains, in months, shown by the participating classes is presented in the following Table.

Mean Gains (Grade 3 to Grade 4) on Metropolitan Reading Test A at Three Levels of Achievement and Homogeneity (in

Test I — Word Knowledge

Homogeneity of Class		*Achievement Le* *High* 45 and over	*Average* 35 - 44	
High	N	11	9	
5.9 and Below	Mean	20.7	11.2	
Average	N	12	40	
6.0 - 8.9	Mean	18.1	14.1	
Low	N	27	26	
9.0 and Over	Mean	14.7	12.6	
Total	N	50	75	
	Mean	16.8	13.2	

Test II — Reading

Homogeneity of Class		*Achievement Le* *High* 45 and over	*Average* 35 - 44	34
High	N	12	17	
5.9 and Below	Mean	19.1	11.2	
Average	N	14	38	
6.0 - 8.9	Mean	13.4	11.0	
Low	N	21	20	
9.0 and Over	Mean	17.1	13.9	
Total	N	47	75	
	Mean	16.5	11.8	

The 181 classes, taken as a group, gained 13.1 months ledge and 12.5 months in Reading over the one year period and final testing. As one would expect, mean gains in achiev be positively associated with initial reading level. Classes achievement showed greater mean growth than those with achievement; the mean growth shown by the latter, in turn, that of classes with low initial achievement. This trend was no sections of the achievement test.

The same generalization could not be advanced, however, were divided into subgroups showing high, average, and lo When this was done, mean growth in Word Knowledge was v for classes showing average or low homogeneity, while on test, the mean growth of classes showing low homogeneity was of classes with average or high homogeneity.

Lack of a consistent growth pattern was even more evide combinations of initial achievement level and class homog sidered. For example, greater growth in Word Knowledge was with high initial achievement as class homogeneity increas showing low initial achievement, however, greater growth wa increasing heterogeneity. In the case of classes showing averag ment, the greatest growth was noted in classes with an avera and the least growth in classes with high homogeneity.

A similar pattern of inconsistency was noted in the Readi the achievement test. For those classes showing high initial a greatest mean gains were made by classes that were classified i geneity category. In the case of classes showing average init the greatest gains between initial and final tests were observe low homogeneity. For classes showing low initial achievem mean gains were noted in classes with average homogeneity.

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Mean Gains (Grade 3 to Grade 4) on Metropolitan Reading Test Achieved by Classes at Three Levels of Achievement and Homogeneity (In Months)

Test I — Word Knowledge

Homogeneity of Class		*Achievement Level of Class*			
		High 45 and over	*Average* 35 - 44	*Low* 34 and Below	*Total*
High	N	11	9	30	50
5.9 and Below	Mean	20.7	11.2	9.0	12.0
Average	N	12	40	24	76
6.0 - 8.9	Mean	18.1	14.1	10.2	13.5
Low	N	27	26	2	55
9.0 and Over	Mean	14.7	12.6	12.9	13.6
Total	N	50	75	56	181
	Mean	16.8	13.2	9.7	13.1

Test II — Reading

Homogeneity of Class		*Achievement Level of Class*			
		High 45 and over	*Average* 35 - 44	*Low* 34 and Below	*Total*
High	N	12	17	25	54
5.9 and Below	Mean	19.1	11.2	9.1	12.0
Average	N	14	38	26	78
6.0 - 8.9	Mean	13.4	11.0	11.2	11.5
Low	N	21	20	8	49
9.0 and Over	Mean	17.1	13.9	9.5	14.6
Total	N	47	75	59	181
	Mean	16.5	11.8	10.1	12.5

The 181 classes, taken as a group, gained 13.1 months in Word Knowledge and 12.5 months in Reading over the one year period between initial and final testing. As one would expect, mean gains in achievement tended to be positively associated with initial reading level. Classes with high initial achievement showed greater mean growth than those with average initial achievement; the mean growth shown by the latter, in turn, was greater than that of classes with low initial achievement. This trend was noted on both subsections of the achievement test.

The same generalization could not be advanced, however, when the classes were divided into subgroups showing high, average, and low homogeneity. When this was done, mean growth in Word Knowledge was virtually identical for classes showing average or low homogeneity, while on the Reading subtest, the mean growth of classes showing low homogeneity was higher than that of classes with average or high homogeneity.

Lack of a consistent growth pattern was even more evident when various combinations of initial achievement level and class homogeneity were considered. For example, greater growth in Word Knowledge was shown by classes with high initial achievement as class homogeneity increased; with classes showing low initial achievement, however, greater growth was associated with increasing heterogeneity. In the case of classes showing average initial achievement, the greatest growth was noted in classes with an average homogeneity, and the least growth in classes with high homogeneity.

A similar pattern of inconsistency was noted in the Reading subsection of the achievement test. For those classes showing high initial achievement, the greatest mean gains were made by classes that were classified in the high homogeneity category. In the case of classes showing average initial achievement, the greatest gains between initial and final tests were observed in classes with low homogeneity. For classes showing low initial achievement, the largest mean gains were noted in classes with average homogeneity.

Conclusions

It is very clear that reducing the range of ability in these classes was not associated with increased achievement in reading. The lesson for the school administrator is equally clear—homogeneous grouping is not a panacea for educational ills. The school administrator who looks to homogenous grouping as a means of improving pupil achievement will find the process of little value unless definite programs, specifically designed for the several ability levels into which they group their classes, are developed. Grouping by itself, without curricular modification as a concomitant, will not give rise to the desired outcome of improved pupil performance.

•*Miriam Goldberg and others. The Effects of Ability Grouping. New York: Teachers College Press, 1966.*

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